TENNESSEE HONORS PROGRAM APPLICATION

Full Name			_ Soc.Sec. No			
Home Address)		
School Name			Date of Birth School Phone (_ County School I	Month)	Day	
Responding to Research Section I (40 points				l's Name (Prin l District of So	nt or type) chool	
1. List all courses (A4, B3, C		9-11. Express qua	lity points in whole	numbers only.		
Ninth Grade			Tenth Grade			
Course	1st Sem. Qual. Pts.	2nd Sem. Qual. Pts.	Course	1st Sem. Qual. Pts.	2nd Sem. Qual. Pts.	
						-
						-
						-
Eleventh Grade						-
Course	1st Sem.	Please list 2 nd se	emester courses			
	Qual. Pts.					
					100 A	
					7796	
					ED-2465 (Rev.	3/07)
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		SSN
		School
Section I (continued)	
	e Point Average (Based on 4.0 Scale) ed number of units at graduation	
Other Achiev	rement Instruments - List and Give Scores	s (Reverse side may be used).
Section II	(20 points maximum)	
	<u> -</u>	ors and other recognition. Be sure to include descriptions tc. (Attach extra 8 1/2 x 11 sheets, if necessary.)
A.	School Related Activities (10 points)	
	1. Academic Clubs and Activities	
	2. Extra-Curricular Activities	
B.	Community Service Activities (5 points	3)
C.	Please describe any special skills, talent	ts, hobbies, etc., you would like considered. (5 points)
Section III	(40 points maximum)	
Please	e answer one of the attached questions acc	cording to the instructions in your packet.
Γo the best o	f my knowledge, the applicant's statement	ts on the foregoing application are true.
Nominated by	y:	Recommended by:
Name		Principal's Signature
Position		Date
-	ed application MUST BE POSTMARKE 0 p.m. CST, Friday, April 13, 2007. Nicole Cobb, Director of School Couns Department of Education 5th Floor Andrew Johnson Tower 710 James Robertson Parkway	ED on Friday, April 13, 2007 AND/OR received by us no eling
	Nashville, Tennessee 37243-0379	



ED-2465 (Rev.3/07)

Name	
SSN	
School	

RESEARCH QUESTIONS

- **I. ARTS:** Choose a twentieth or twenty-first century *creator* of art: composer, choreographer, playwright, painter, sculptor, etc. Discuss this artist's work, what makes the work unique to this artist, specific influences that affected his or her work, and the impact of this work on society (either on society as a whole or on specific segments of society). You should include a minimum of 5 or 6 references. These references must include several sources other than the internet and textbooks.
- **II. LANGUAGE ARTS:** The individuals listed below have made strong contributions to Tennessee literary history:

Sequoyah; Shelby Foote; Caroline Gordon; and Father Abram Ryan.

Select **ONE** of these and write a research paper that includes these points:

- background of the individual and the time in which he/she lived;
- contribution to literary history/tradition (e.g., Sequoyah, Cherokee alphabet, Father Ryan, poetry)
- ongoing effect of the individual on the literature of Tennessee and/or the United States

Remember: This is a research paper, and it should show evidence of thoughtful investigation and consideration. You should use at least four (4) sources, only one (1) of which should be an online resource.

- **III. SCIENCE:** Research the causes and effects of global climate change. Write an essay that summarizes these causes and effects and that includes discussion of at least three approaches to prevention/clean up of greenhouse gases on which you feel the U.S. should focus efforts.
- **IV. SOCIAL STUDIES:** You are a present day U.S. Senator. You are faced with increasing opposition to the Iraqi war from your constituents. Bills are being introduced to limit funding and reduce troop numbers for the war effort. In 1500 words or less, state your position on the war, what you propose to do about it and your stand on any proposed legislation concerning the war.
- V. CAREER & TECHNICAL EDUCATION:

You may choose only ONE of the following two questions:

1.) In the technologically advanced society that we live in, web pages have become an effective tool for everything from advertising to on-line information and databases. With this in mind, create a web page(s) for a character in a work of fiction that you have read and/or studied in school. In an essay, explain what you included, and what areas of research you used. Please include a hard copy of the site along with a floppy disk. Please ensure that you include your picture and sound files on the disk. The site is not limited to 500-100 words.

2.) Describe what is meant by "The New Economy" and research how it relates to your chosen vocational program area.

Include:

Impact on job market Technology Worker behaviors Training/education needed

VII. MATH: Euler's Formula

$$e^{ix} = \cos x + i\sin x$$

Leonhard Euler is considered one of the greatest mathematicians to ever walk the planet. His memory, his ability to perform mental calculations, and his sheer volume of work (even while totally blind) are facets of a man whose abilities are still difficult to fathom.

He developed many formulas, but one that has been historically referred to simply as *Euler's Formula* is:

$$e^{ix} = \cos x + i \sin x$$

This year's math problem will be devoted to this simple, yet profound expression. Your assignment is as follows:

- 1)Provide a concise historical setting for the man, the formula and its discovery. (approximately 1 -2 pages.)
- 2) Provide your most elegant proof of Euler's Formula. Include appropriate figures. (There is no limit to number of pages you may use here, but lengthy proofs are rarely elegant. Keep it reasonable.)
- 3) Richard Feynman, now legendary physics lecturer at CalTech, said that Euler's Formula was the most remarkable formula in mathematics.
 - a) Why would Feynman say such a thing?
 - b) Give some ramifications, applications, connections, examples, etc., of the power and usefulness of Euler's formula.

[NOTE: Question #3 should be expansive enough to demonstrate your knowledge, but concise enough to move quickly and keep the reader's attention. The emphasis is on keeping the reader's attention, and demonstrating your broad knowledge of the implications of Euler's Theorem. An exhaustive treatise is not advised.]

Please adhere to these guidelines:

- 1) All entries should be typed.
- 2) On narrative sections use 1 ½ spacing, Times New Roman, size12 font. Use 1 inch margins.
- 3) On proofs, use appropriate spacing.